We claim:

A method of producing a semiconductor device, comprising the steps of:

dry etching an upper layer pattern of an insulating film in a state where at least a part of the insulating film formed on a substrate is exposed; and

exposing a surface of the insulating film to a film formation atmosphere of the insulating film.

2. A method of producing a semiconductor device according to claim 1, wherein the insulating film is formed by a chemical vapor deposition method.